US-AEP

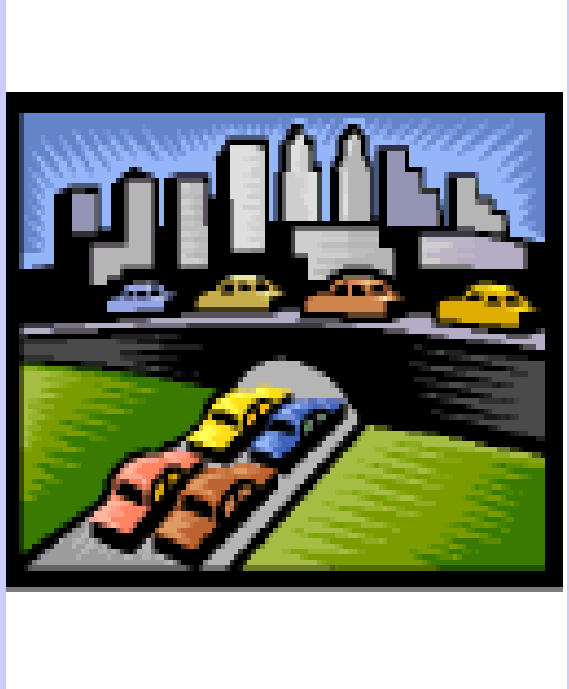
A Program of USAID

ECO-HOUSING

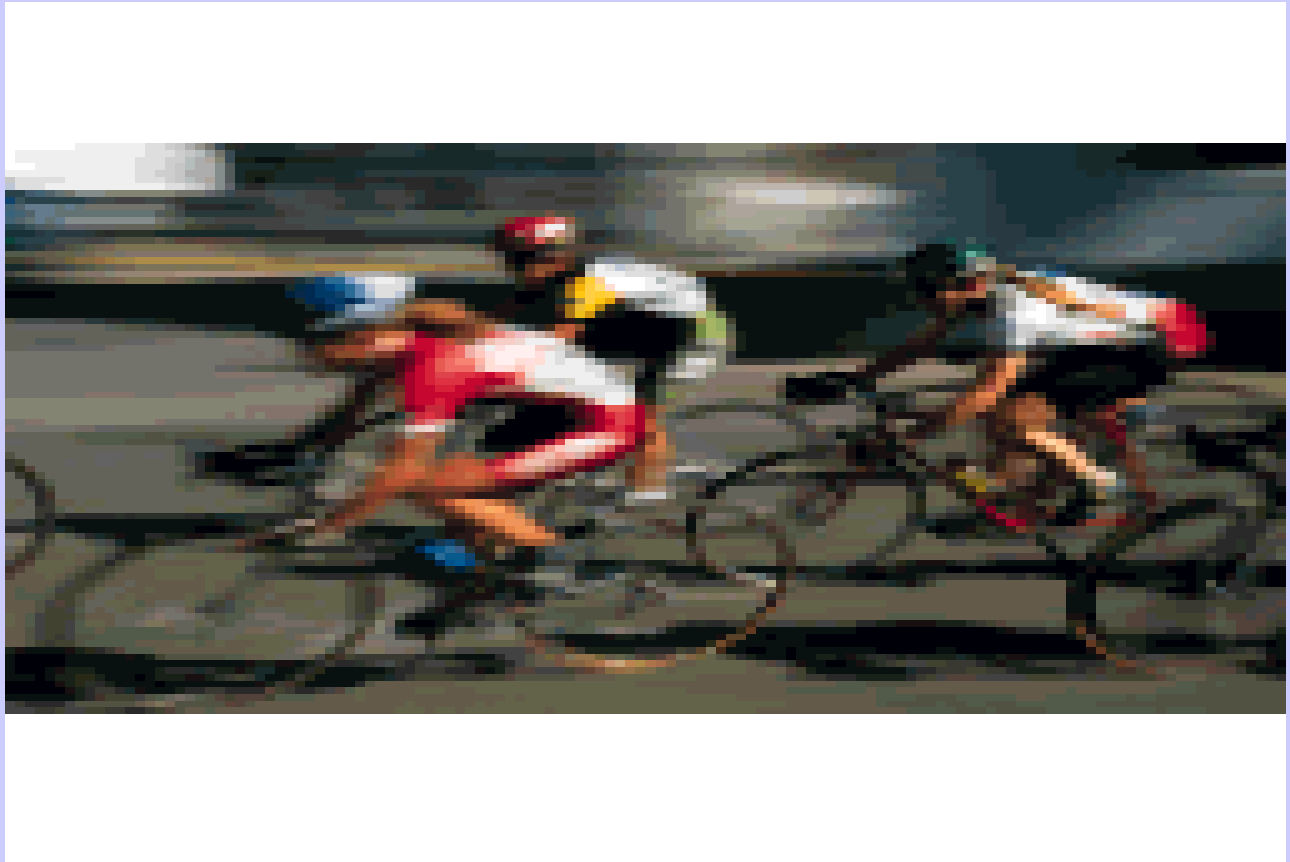
A radically new approach to long term care….

POPULATION EXPLOSION

INFILTRATION FROM RURAL AREAS TO URBAN CENTER



COMPETITION-FOR SURVIVAL



BASIC REQUIREMENTS OF HUMAN BEINGS

- Roti

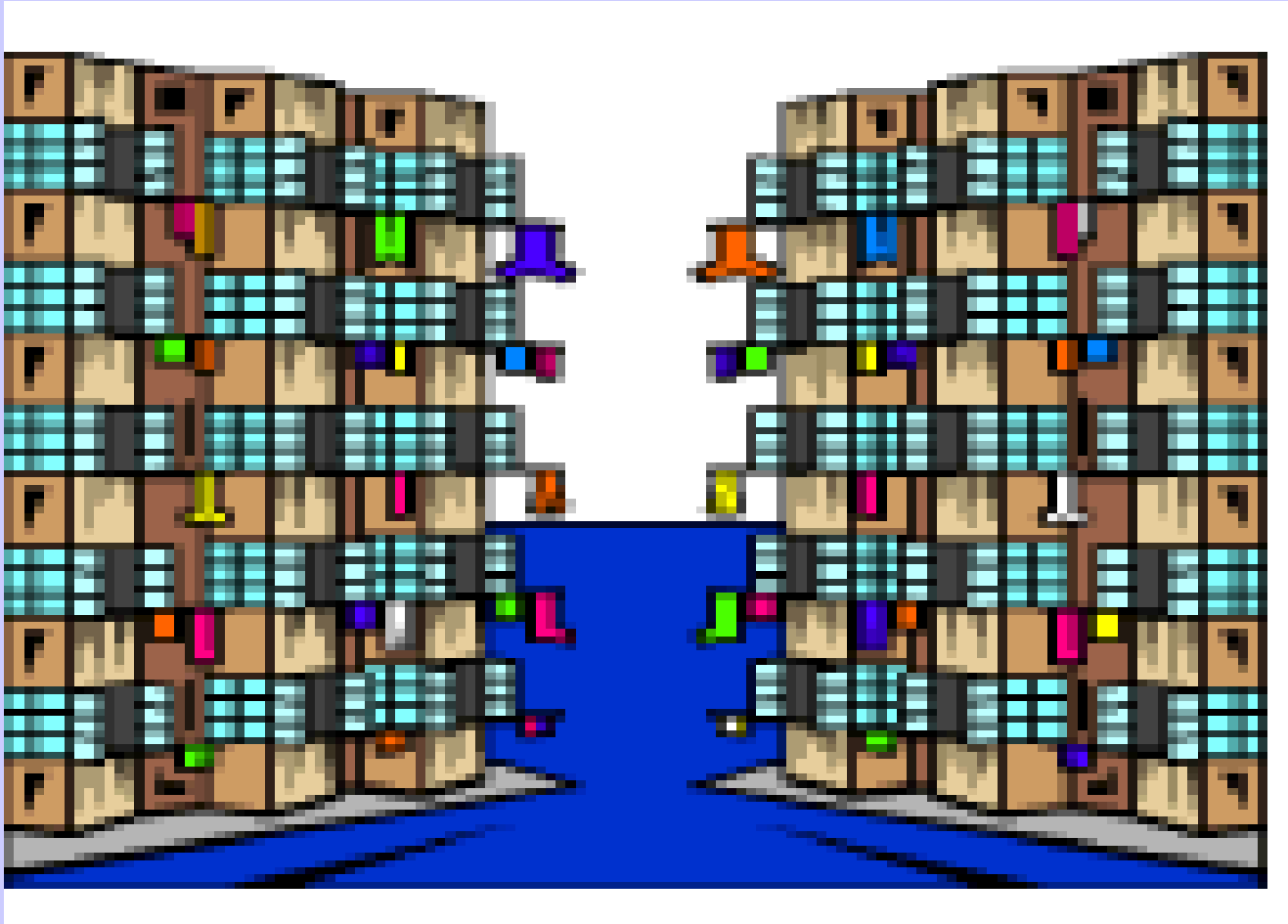
- Kapada

- Makan

PROBLEMS CAUSED

- Drinking water
- Power cuts
- No sanitation and hygiene in cities
- Spread of diseases

RAPID DEVELOPMENT OF HOUSING COLONIES WITHOUT PLANNING



ENVIRONMENTAL IMPACT OF URBAN BUILDINGS

- Consume almost 30 % of state energy
- Generate about 25-28 % of state's solid waste
- Produce over 20 % greenhouse gases
- Affect occupant productivity

INCREASE IN DEMAND FOR URBAN CIVIL SERVICES

LACK OF MEETING THIS DEMAND AFFECTS THE ENVIRONMENT SERIOUSLY

AND YET,
AT THIS PLACE

EVERYONE HAS A
DREAM……

TO BUY HIS OWN HOME

ECO HOUSING PROJECT

Supported and Partnered by

United States-Asia Environmental Partnership
United States Agency for International Development
Global Development Alliance
International Institute of Energy Conservation
Builders Association of India
Indian Institute of Architecture
Rachna Sansad Academy of Architecture
Pune Municipal Corporation
And other local stakeholders

WHAT IS ECO HOUSING ?

- E: Environment Friendly
- C: Conservation of Resources
- O: Optimize the Cost of Urban Living

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When we build, let us think that we build forever

OBJECTIVE OF THE PROJECT

To popularize and facilitate the creation of green buildings and develop and promote models of urban community.

FOCUS AREAS

Site selection and impact on biodiversity

Environmental Architecture

Eco friendly construction practices and material

Water conservation, recycle and reuse, rain water harvesting

Decentralized sewage treatment, recycle and reuse.

Solid waste management best practices and technology adopted to achieve zero garbage

Utilization of renewable and energy efficient technology

HURDLES

- Lack of proper understanding of the concept of eco housing.
- Lack of suitable policy framework
- Perceived as cash intensive
- No immediate commercial gains
- Lack of communication and coordination from various stakeholders

GOALS AND IMPLEMENTATION REGION

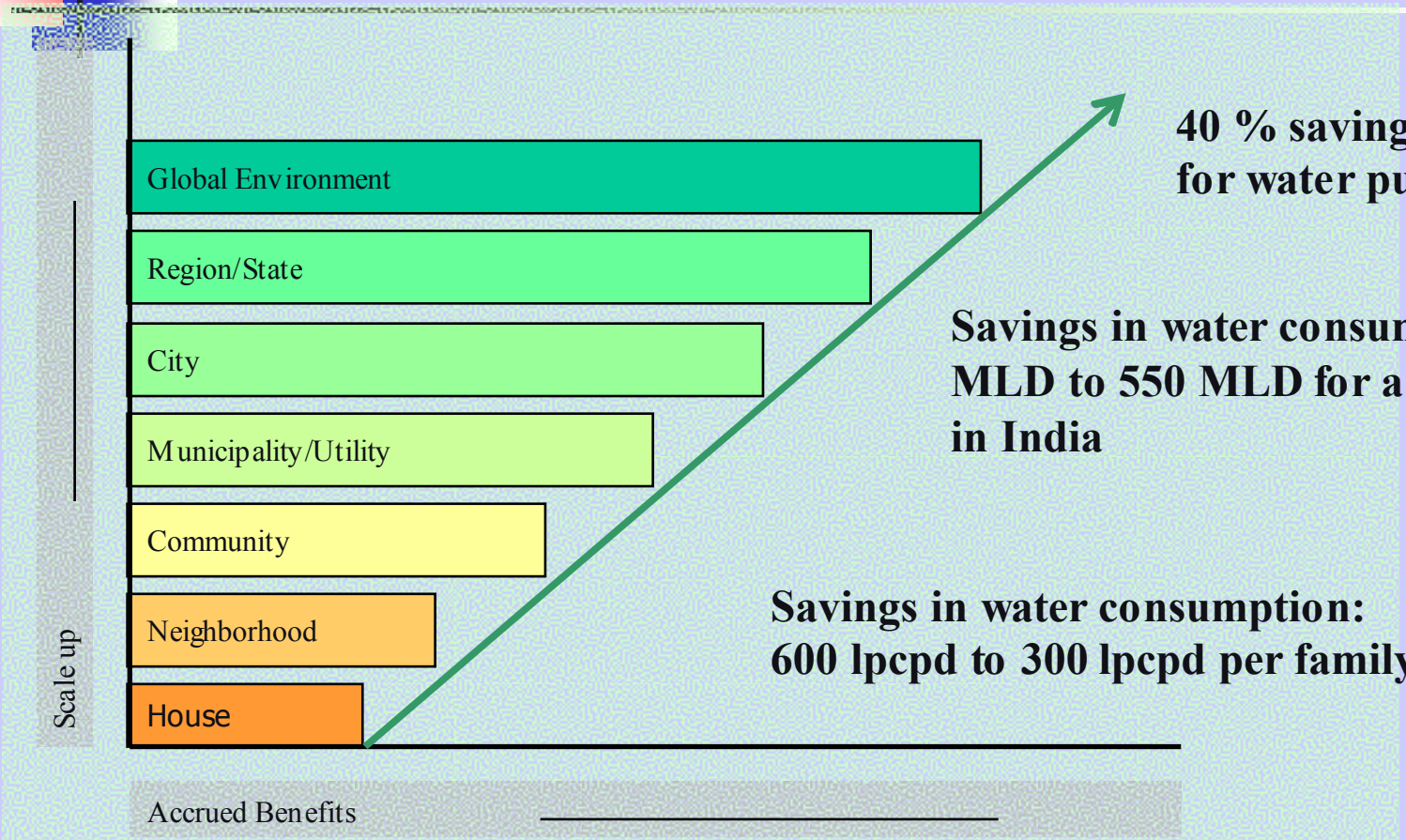
- Creating enabling policy environment to mainstream ECO-housing (environmentally benign housing with longer lifecycle at optimal cost) in India
- Assess technical, regulatory, financing and entrepreneurial aspects of ECO-housing
- Design and facilitate creation of a model ECO-housing at one municipal corporation
- Implementation region: Western India

SUCCESS PARAMETERS

- Established regional policy that promotes ECO Housing with involvement of municipal corporations, state governments, builders, architects, material suppliers and financiers
- Capacity building, information dissemination, training of professionals
- Certification by financing company / lower interest financing
- Defined policies – city / state / regional policies
- Evaluation tools for quantifying benefits and benchmarking "ECO Housing"
- Demonstration site developed in Pune and other projects under planning

PROGRAM RATIONALE

Increasing benefits with engagement of expanding value chain



40 % savings in energy use for water pumping

Savings in water consumption: 960 MLD to 550 MLD for a Class "B" city in India

Savings in water consumption: 600 lpcpd to 300 lpcpd per family

Increasing Accrued Benefits of Eco-Housing

PARTNERSHIP

Builders

Research Inst.

Architects

Environmental firms

Financial Institutes

Municipal Corporations

Other donor organization

NGOs (ALM)

WHAT DOES IT COST ?

U.S study reveals that it costs

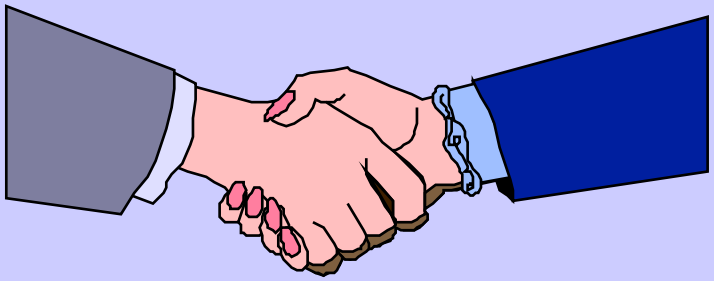
2 %-5 % average additional cost to construct a green building compared to a conventional one

$3-$5 additional cost per square foot to construct a green building

SUSTAINABILITY OF THE PROJECT

Formation of ECO-HOUSING Entrepreneur cell to work towards achieving our objectives.

Never doubt that a small, group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.

Margaret Mead

THANK YOU